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Gender mainstreaming and water development projects: analyzing unexpected enviro-social impacts in Bolivia, India, and Lesotho

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ABSTRACT

Gender mainstreaming policies and programs, meant to be gender-sensitive or to target gender issues, are increasingly implemented by both governmental and non-governmental actors. However, these projects seem set to continually aim solely at women, despite more than a decade of work encouraging broader scope. Using recent case studies from Bolivia, Lesotho, and India, we address the tensions laden in three major questions about water, gender, and development: (1) Is mandatory inclusion of women in water governance and decision-making effective?, (2) Do water development projects provide equal benefits and burdens for women and men?, and (3) In what ways are water projects and their policies impacting and impacted by gendered enviro-social spaces? By providing triangulated data from ethnographic studies in three distinct local contexts, we are able to pinpoint major cross-cutting themes that serve to highlight and interrogate the gendered impacts of water development projects' policies: public and private lives, women's labor expectations, and managing participation. We find that gender mainstreaming endeavors continue to fall short in their aim to equitably include women in their programming and that geographic, environmental, and socio-cultural spaces are intimately related to how these equitability issues play out. We provide practical recommendations on how to address these issues.

Transversalización del género y proyectos de desarrollo hídrico: análisis de impactos socioambientales inesperados en Bolivia, India y Lesoto

RESUMEN

Las políticas y programas de transversalización de género, diseñadas para ser sensibles al género o con objetivos en temas relacionados con éste, se implementan cada

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vez más tanto por actores gubernamentales como no gubernamentales. Sin embargo, estos proyectos parecen programados para apuntar únicamente y en forma continua a las mujeres, a pesar de más de una década de trabajo alentando un abordaje más abarcativo. Utilizando estudios de caso recientes de Bolivia, Lesoto e India, analizamos las tensiones generadas en tres cuestiones principales acerca del agua, el género y el desarrollo: 1) ¿Es efectiva la obligatoriedad de la incorporación de las mujeres en la gobernanza y la toma de decisiones sobre el agua?, 2) ¿Los proyectos de desarrollo hídrico brindan los mismos beneficios y cargas a las mujeres que a los hombres?, y 3) ¿De qué maneras los proyectos de agua y sus políticas están impactando en los espacios socioambientales generizados, y de qué manera están siendo impactados por éstos? Ofreciendo datos triangulados de estudios etnográficos en tres contextos locales distintos, pudimos identificar importantes temas transversales que sirven para destacar e interrogar los impactos generizados de las políticas de los proyectos de desarrollo hídrico: las vidas públicas y privadas, las expectativas laborales de las mujeres y la administración de la participación. Encontramos que los esfuerzos en pos de una transversalización del género continúan teniendo sus límites en su intento por incluir de forma equitativa a las mujeres en su programación y que los espacios geográficos, ambientales y socioculturales están íntimamente relacionados con la forma en que se desarrollan estos temas de equidad. Brindamos recomendaciones prácticas sobre cómo abordar estos problemas.

性别主流化与水资源发展计画：分析玻利维亚、印度与莱索托中非预期的环境—社会冲击

摘要

理应对性别敏感或聚焦性别议题的性别主流化政策与方案，正逐渐由政府与非政府行动者实行。尽管十多年来不断鼓励扩大性别主流化的工作范畴，但这些方案似乎持续仅针对女性。我们运用玻利维亚，莱索托与印度的晚近案例研究，应对有关水，性别与发展的三大问题中充满的紧张关系：（1）强制将女性纳入水资源管理与决策是否有效？（2）水资源发展计画是否对男性与女性产生相同的效益与负担？以及（3）水资源计画及其政策以什麽方式影响性别化的环境—社会空间并受其影响？透过提供三个特殊地方脉络的民族志研究的三角交叉数据，我们得以精确定位强调并探问水资源发展计画方案的性别化冲击的主要交错议题：公共与私人生活，女性的劳动期待，以及经营参与。我们发现，性别主流化的努力，持续无法达到公平地将女性纳入计画的目标，而地理、环境和社会文化空间，与这些平等议题如何展开紧密相关。我们对如何应对上述问题提出务实的建议。

Introduction

Embraced by water researchers with increasing urgency over the past two decades, critical development theory has sought to forward gender equality and equity in water management and decision-making (Bennett, Davila-Poblete, and Rico

2008; Blumtritt 2013; Laurie 2011; Manase, Ndamba, and Makoni 2003; Regmi and Fawcett 1999; Wills 2012; Wutich 2009; Zwarteveen and Bennett 2005). Still, gender is usually reduced to an essentialized and homogenized understanding of women (cf. Coles and Wallace 2005). The product of this thinking is seen in gender mainstreaming, female empowerment, and other women-centric programs implemented by water development agencies in a variety of regional contexts. There is a pervasive expectation that women, as primary users of water in the household, inherently benefit from water projects. Meanwhile, there is a concurrent false assumption on the part of development actors that water development projects are inherently beneficent and that the placement of water infrastructure aids everyone equally, an idea that, while pervasive in practice, continues to be challenged in academic literature (Davila-Poblete and Nieves Rico 2005; van Houweling 2015; Laurie 2011). The intersection between power, space, and place make understanding gendered outcomes from water development programs a multi-layered process.

This article addresses gendered outcomes from water development projects in three different locations: Alto Beni, Bolivia; Maseru District, Lesotho; and Madhya Pradesh, India. Based on these ethnographic studies, we seek to address three major questions: (1) Is mandatory inclusion of women in water governance and decision-making effective or empowering?, (2) Do water development projects provide equal benefits and burdens for women and men?, and (3) In what ways are water projects and their policies impacting and impacted by gendered enviro-social spaces?

Realities and approaches for gender, space, and place

In this article, we seek to illuminate the ways in which water is imbued with the power to transform both the natural and social, or hydro-social,[1] relations of a given locale. The distribution of water is shaped by power and, in turn, shapes power relations (Loftus 2009; Swyngedouw 2009). In addition, social relationships, power, roles and responsibilities related to water are both culturally and geographically defined – and gender is a key way in which individuals relate. 'Spatializing' water, or attending to practice within a place where water flows (see Cornwall 2002; Swyngedouw 2009) is, therefore, also critical in understanding water resource management. Ethnographic insight into the macro and micro-politics of place (both location and the history, and attending meaning within it)[2] and the more organic concept of space, as defined above, are the necessary compliments to a gendered perspective, as we show throughout this work.

Gendered political ecology

This article builds on literature within political ecology, which effectively examines water and development relationships (Sultana 2013). Within a development

context, water processes are negotiated at multiple levels (cf. Derman and Ferguson 2003; Ferguson and Derman 2005), thus, a multi-scale analysis, building on political ecology, is required (Agarwal 2001; Blaikie and Brookfield 1987; Buechler and Hanson 2015; Derman and Ferguson 2003; Gezon and Paulson 2005; Harris 2009; Johnston 2003).

Additionally, hydro-social spaces require an equally complex methodological approach for sites as for scales. One approach to uncovering the complexity of site-based experiences is through 'gendering' and 'spatializing' concepts such as community and participation in development projects (Cleaver 1999; Cornwall 2004; van Houweling 2015; Nightingale 2006; O'Reilly 2010; Sultana 2009, 2015). As water is simultaneously natural and social, it is within these hydro-social spaces that scholars are tasked with teasing out the intersectionality of subjectivitites such as gender and class as they are lived in relation to the environment (Hippert 2011; Loftus 2007; Sandler and Rao 2012; Sultana 2009, 2013, 2015). Such gendering of a hydro-social space involves the examination of multiple relations, between women and men, women and women, and men and men within their environment. A focus on pluralities of position and marginality (Cornwall 2004; Paulson, Gezon, and Watts 2003; Tolhurst et al. 2012), and attention to translocal relationships (Whiteford and Cortez-Lara 2005, 233) is necessary. According to Nightingale (2006), as gender roles and the environment are mutually constituted, it's not enough to consider how gender roles change, we must consider how gender as a social construct changes.

Critical development and gender mainstreaming

A disconnect between policy and practice in the area of gender mainstreaming initiatives is widely noted in the work of water researchers (e.g. Ahlers 2005; Arora-Jonsson 2014; Bennett, Davila-Poblete, and Rico 2008; Brikke 2000; Harris 2009; Hippert 2011; van Houweling 2015; Wills 2012). While there are many valid criticisms of gender mainstreaming, those most relevant to this discussion are concerned with empowerment and participation (Cleaver 1999). Gender is relational and requires attention to power and intersectionality with subjectivities such as age, class, sexuality, and marital status, among others (Agarwal 2001; Buechler and Hanson 2015; Cornwall and Rivas 2015; van Eerdewijk and Davids 2014; Harris 2009; Tolhurst et al. 2012). Gender impacts the entirety of social lives, yet mainstreaming often focuses solely on particular expected relationships or 'women's issues', thus leading to both a naïve use of 'communities' and 'women' and entrenching pervasive myths about women's selflessness and responsibilities (Cornwall 2003, 1326–1335). While NGOs often assume that participation in water projects will be empowering, by spatially situating participation and empowerment, they shape experience through their very invitation to participate, for better or worse (Cornwall 2004). These projects' unintended consequences are often moderated or subverted by those who take part – however the techniques for this vary by context

(O'Reilly 2010); power and positionality are lynchpins in this process. An additional point of clear importance is the understanding that men, too, are impacted by development projects. Laurie argued in 2005 that, 'more than two decades of mainstreaming gender into development research and policy have failed to come to grips with the masculine subject' (527), and still, men's place in development is an ongoing debate (Tolhurst et al. 2012). Gender relations remain a key area of interest (Cornwall and Rivas 2015). From all sides, 'doing gender' requires continued critical attention to both spatial and relational aspects of development, and despite increasing attention, the hard work of understanding gender in development is not yet done.

Feminist economics for water and development

A feminist economics orientation (see Escobar and Harcourt 2005; Gibson-Graham 2002, 2005a, 2005b, 2008; Sweetman 2012) similarly recognizes that gender is relational and that gender relations are power relations. This paradigm underscores how capitalism is not monolithic in its domination and that there is room for resistance in the capitalocentric (or capitalist-valorizing, see Gibson-Graham 2005a) development industry. This perspective directly informs understandings of women's relationships with water development projects as the neoliberal ideology inherent in them is both, 'adopted and adapted' (O'Reilly 2010; see also Arora-Jonsson 2014; Nightingale 2006). A second key contribution is the understanding that non-remunerated activities such as housework and caregiving are important and should be appreciated – and thus narrow expectations that simple income generation can empower women is often a fallacy (cf. Harcourt and Escobar 2005). In other words, both capitalist and non-capitalist activities have the potential for empowerment and exploitation (Cameron and Gibson-Graham 2003). This framework helps us to unpack the economic and social impact of water work undertaken outside and within the market economy, and encourages consideration of this in water development projects, as highlighted throughout our empirical section that follows.

Case studies

Each of the case studies that follow highlights what have emerged from our work as iterative themes: Public and Private Lives, Women's Labor Expectations, and Managing Participation. We first present aspects of our case studies that led to the themes' development, and then focus on further explanation of these themes in the discussion. Table 1 gives an overview of the methods used for each case study and the major water problems that the communities faced. Each case study represents a small part of a larger body of work related to water development conducted by one of the authors in their respective region. All names used are pseudonyms.

Table 1. Summary of case study methods and major water problems.

Case study	Methods used	Major water problems
Alto Beni, Bolivia	Semi-structured interviews with key water users ($n = 32$)	Cost of water
	Semi-structured interviews with development workers ($n = 11$)	Infrastructure maintenance
	Surveys with community members ($n = 138$)	Community management
	Participant observation	Rights to water
	Focus groups ($n = 4$)	
Maseru District, Lesotho	Informal interviews with development workers ($n = 20$)	Water scarcity
	Semi-structured interviews with community members ($n = 56$)	Drought
	Surveys with community members ($n = 75$)	Severe rains
	Participant observation	Community management of water tanks
Jhabua, India	Interviews with key water users and NGO staff ($n = 28$)	Access to water
	Surveys with community members ($n = 115$)	Community management
	Participant observation	Extreme drought

Female empowerment in rural Bolivia[i+]

Introduction and context

In Alto Beni, Bolivia, a WatSan project implemented by a U.S.-based NGO included the construction of potable water, sewage removal, and wastewater treatment infrastructure. The project employed a water committee model, which was designed to entrust the continued upkeep of the system to local, elected representatives. Beyond participation in the committee, local community members were expected to volunteer to assist when infrastructure problems arose (e.g. leaks in pipes, maintenance of grounds where systems were located, etc.). Women were encouraged by development actors to participate both in elected positions as well as in volunteer capacity surrounding water infrastructure development and maintenance.

Public and private lives

Women's private lives in Sapecho, including their work, spousal support, and individual agency, were integral to their ability to participate in public WatSan governance, whether in an elected position or as a part of the volunteer community – and in this case the private sphere all but barred public representation. This is particularly problematic as the water system had the greatest impact on women in that it changed the ways in which they used water at the household level. While on the one hand, there was a view that women *could* serve on the water committee (99.1% of survey respondents felt that women had an equal chance of being on the water committee as men), on the other, women were stymied in their ability to take up an actual position in WatSan decision-making due to pressure in their private lives. For example, while a woman was technically elected president of the water committee, her husband actually served in the role.

Women's labor expectations

Throughout the project, it became clear that gender roles in the community were situated such that women didn't have the time, support, or confidence to actually carry out water infrastructure tasks directly due to other labor expectations. Monica gave a particularly representative and candid report on women's positon within the community:

> Basically, in this area, what I have seen is that the women work a lot; they work in their house, they work in their agricultural plots … and the men are stuck worrying about these things, too. But women have two jobs because they have a job in their house. They have to cook, care for their children, and after that go to work in their plots, and I think they don't have time for this [participation in WatSan]. (Interview, Alto Beni, July 2012)

A key issue here is that women's household responsibilities and daily work in agriculture were assumed, and as a result, many men and women felt that the WatSan work took time away from these tasks.

Managing participation

Development actors and community members alike clearly knew that it was expected they include women in meetings, construction of water systems, and in the project management. However, despite this, development actors could see there were entrenched gendered roles that were difficult to offset with gender policies; one practitioner stated that there were more men in engineering and maintenance and 'some women in the water committee, usually … [but] women don't play as big a role as men in the water committee. But at the same time, when it comes to … doing the work for the system, women aren't involved in that' (Interview, La Paz, 2012). While the projects were meant to counteract, or at least counterbalance these entrenched gendered realities, the projects did little to actually address these cultural biases, instead requiring women's participation in a sphere where problems in their work and their private lives effectively made the participation burdensome.

'Smart economics' approach to income generation in Lesotho[ii]

Introduction and context

Many organizations follow the 'smart economics' model of gender and development in Lesotho. The model assumes that, with the time saved from fetching water, Basotho women, or the women of Lesotho, will have more time to engage in income-generating activities such as selling vegetables. This is one of the primary priorities of the large-scale, donor-funded infrastructure development project in Lesotho; however, this case study directly counters the developers' assumptions about this approach. That is, few women who participated in this research expressed any interest in starting cottage industries or forming gardening cooperatives, despite the implied relief from fetching water.

Public and private lives

There are many reasons why women would not be able to take on the responsibility of growing and selling crops in addition to their demanding daily chores. In Lesotho, as in many places, not all women have the same access to resources. Here, participation in grassroots collectives was contingent on class, wealth, and social position within the community. Another concern for the community was the retrenchment of miners from South Africa. Men return to their homes to presumably resume their status as head of the household, and if women become the main breadwinner or have access to resources from gardening coops, this can cause tensions.

Women's labor expectations

As water and food insecurity is felt acutely by women in rural Lesotho, it could be expected that they would organize around these issues. In line with historical accounts, some older respondents stated that people used to help one another farm and that they would all share in the harvest. However, there are micro-politics involved with organizing to take collective action against issues such as water and food insecurity. Collectives function on trust and shared interests, and women in a village have multiple identities other than being 'women'. Considering the micro-politics of village life and the moral economy within communities, it may be disadvantageous to participate in a new income-generation program or to appear better off than one's neighbors. Given the retrenchment of men from the mines and the high rates of unemployment, women might not be openly engaging in business to avoid tension and strife within their interpersonal relationships. This case study supports Sweetman's research (2001) in that, women may have feared negative repercussions if their husbands saw them as being able to earn wages.

Managing participation

In considering community organizing and 'smart economics' development, researchers cannot underestimate the impact of gender relations in communities, for example the retrenchment of miners in Lesotho, on women's ability to participate in 'empowering' activities. As one woman stated, the thing she wished for most in her home was to see her husband get a job, 'so we can live in harmony.' Collective farming could be a contested space, as men return to reclaim activities that were women's, by default, when men were away in the mines. Women, too, were not organizing around gardening, more traditionally a women's space, or attempting to form cooperatives to supplement the food in the households, which could similarly reflect these gendered tensions.

Mainstreaming gender and women's participation in Jhabua, India

Introduction and context

The experience of women in a watershed program being implemented by a mid-level NGO in the district of Jhabua, Madhya Pradesh, in a Bhil community shows

how mainstreaming can inadvertently drive negative outcomes related to gender, empowerment, and participation in development. Begun in 2006, one of the principal goals of the program, besides increasing sub-surface recharge, is to involve women in the participatory process. The program aims to raise awareness amongst women of their decision-making capacity, raise awareness amongst men as to the importance of women's participation, and create practical and strategic spaces for women to participate (NGO Publication 2007). Prioritization of women-only Watershed Development Committees (WDCs) and Self-Help Groups (SHGs), and enforcing mandatory inclusion of women in the WDCs is considered a best practice.

Public and private lives

The WDCs were designed to encourage widespread community participation in watershed development projects. Despite similar constraints on women's time, participation, and interest in SHGs, and the fact that meetings are frequently not a priority for the women themselves, NGOs stipulate mandatory attendance from women. By doing so, rather than creating a space within which women are able to meaningfully participate and represent themselves, NGOs instead create a space within which women are often coerced into attending meetings by their families (male and female members). This is largely due to a perception on the part of their families that simply by attending meetings these women, and by extension her family, may gain some monetary or development advantage.[3]

Women's labor expectations

The program stresses the creation of SHGs to encourage women to save money for purposes of internal loaning, as well as to have a clear group to involve in developmental activities taking place in the community (beyond just water-related topics). The purported aim is to eventually organize all women in the community into SHGs and implement various programs through them, thus ensuring a high percentage of participation. However, the Bhil have a strong tradition of seasonal migration undertaken by entire families from August to March to supplement agricultural activity. Due to this migration, many women are not present in villages for a large part of the year, thus are unable to participate fully in SHGs. In addition, several time-related constraints limit women's ability to participate in 'mandatory' meetings (for example, not having adequate child care, having to take care of agricultural work and household duties). Other constraints include inability to sustain the requisite monthly monetary contribution, internal village conflicts, or disbelief in the benefits of saving.

Managing participation

Improving visibility of women in the eyes of funders has become key to demonstrate program participation.[4] In events organized by the NGO, where government officials were certain to attend, there was an implicit understanding that women from nearby villages must constitute 'at least 90 percent' of the audience.

Interviews also reveal that while some women are interested in attending NGO-organized events to further their livelihood capacities and gather pertinent information, often they participate because they have been instructed to do so by either the NGO or their families. By organizing groups and requiring involvement of women in SHGs and WDCs, NGOs are in fact governing rather than empowering. As a consequence, not only does NGO staff uncritically echo discourse that comes from the 'top', but targets of the programs also become fluent in such 'gender-talk.' Upon asking how Bhil community members feel about women's participation in the program, the general consensus is that women *should* be involved in the development process, and *should* be able to go to meetings and interact with development actors and government officials. However, those respondents were rarely able to articulate why this was so. Rather than speaking toward specific outcomes or benefits to women, most simply stated that women should offer opinions, participate, and be involved because *acchcha hai* (it is good.) It was unfortunately unclear how participation in the watershed program helped to empower Bhil women in any real, meaningful way, let alone effectively alleviate their water-related burdens.

Addressing cross-cultural themes in gender, water, and development

These three examples elicit several issues with gendered policies in water projects and as we continue to the discussion, we delve deeper into the three themes. Each of these themes flows into the next, thus the distinction between them is somewhat artificial. Understanding that these themes represent waypoints in an interconnected process of gender impact in water projects is essential.

Public and private lives

The public/private tensions in these case studies are illustrative of a wider problem wherein NGOs work toward women's empowerment, but fail to address local cultural barriers at the public *and* private level. As women's unpaid household work is central to supporting both the household itself and the paid economy (Ahlers and Zwarteveen 2009), the constraints of women's work at home should be considered as a key systemic constraint on participation in water projects. Forcing female 'participation' without looking at the lived experience of that mandate is providing a cosmetic rather than effectual approach to women's empowerment, as we have shown in the three cases. Instead, women's household work and private lives should be respected and supported so that they may enter water development participation unencumbered.

Also to this end, male family members should be carefully included in programs aimed at women's empowerment. There is a recent call for renewed attention to power relations and gender relations (Cornwall and Rivas 2015), and our work answers that with constructive recommendations supported by the three diverse yet resonant case studies. Just as 'add women and stir' was inefficient, so too is 'add

men, also, and stir.' Ensuring measurable attention to full *gendered relationships*, not just the rote inclusion of women and men, is paramount.

Women's labor expectations

Our studies show that women are not participating in cooperative activities around water development projects because individual needs, such as maintaining the security and working order of the home, outweigh the need to come together and organize as women. In addition, as men's lives are changed (e.g. miners retrenched in Lesotho, seasonal labor lost in Bolivia) many who were once the breadwinner of the family are emasculated by the loss of employment, highlighting the public/private disconnect related to gender, labor, and money. Women are encouraged to 'work' (whether paid or unpaid) with NGOs, but this labor comes with prestige, a hefty time commitment, and a change in gendered expectations. If water work is paid, women may fear abuse if they are earning wages and their male partners cannot, as seen in Lesotho. If water work is unpaid, but participation gives status or access to opportunity through NGO groups, the effect can be the same, as seen in Bolivia. Similarly, as seen in India, if water work is assumed to bring opportunities for the family as a whole, women can be forced to participate, even against their will. All the while, women's household work and day-to-day labor constrains their ability to participate in further work, and constrains their interest in the project as a whole. Given the economic focus of women's empowerment programs, one has to weigh the costs and benefits for the women themselves. Development projects aimed at raising women's income generating capacity and 'empowerment' must take into consideration the responsibilities that women already have. Simply assuming women can and should take on leadership and/or voluntary roles in water governance, or utilize improved water access for income generation, neglects constraints already faced by women. This assumption may inadvertently create more work for these women, and unpaid work at that.

Managing participation

Targeting women to participate based on their use of water in the home ignores the socially constructed causes for such a division. Women were indeed overwhelmingly responsible for water tasks in Bolivia, Lesotho, and India. By not recognizing or considering various power and social relations that create the gendered roles which women are forced to play, but rather by benefiting from those already existing expectations, development organizations are implicated in the exploitation of women. They actively serve to reproduce gender hierarchies by reasoning that women should participate in the project because of the socially-constructed customary roles that create their water knowledge (O'Reilly 2006). Paradoxically, these are the exact same set of tasks that we have found bar their participation in water and development projects.

Moreover, the idea that forcing women to participate in public water activities will lead directly to their having power or representation within that system is a

fallacy. The creation of a social space in which women can participate does not imply the exemption of that space from traditional social and gendered roles, nor does it mean that these spaces will provide a place of freedom or empowerment. Instead, in all three case studies here, social spaces have proven difficult to navigate for women, and communities (including the men within them) have found unexpected and 'hidden' ways to present participation to NGOs while further limiting women's abilities to truly play a role in water projects.

Theory and practice

The participatory process is a complex negotiation and reconciliation of needs presented at different hierarchical levels among stakeholders. The politics of institutions themselves, as well as individual personalities and differing contexts make development projects a moving target (Harrison 2003). Often, there is a production of false dichotomies within development narrative and action –donors vs. recipients, 'us' vs. 'them' – with development actors frequently portrayed by critical analyses as the 'greatest anti-heroes' (Harrison 2003, 113). Project failure is habitually laid squarely at the feet of NGOs, with disregard for the politics that accompany, and often hinder, development actions. Some of the political issues are, as pointed out by Nagar and Raju (2003), the professionalization and globalization of NGOs that are increasingly tailoring their approach to address donor-driven development agenda, reduced transparency and accountability, internal organizational hierarchies, and most importantly, the changing relationship of NGOs with governments and donor agencies to that of contractual employment. Mathur (2012) notes in her fieldwork in northern India that 'politics' within development can be debilitating if not recognized and addressed.

Even appreciating these constraints, however, the quest to incorporate gender has tended to simplify, technify and bureaucratize the critical nuances that 'doing gender' implies. To date, by making the addition of gender more manageable, applicable, and easy to understand, development policies and practitioners turn what should be a radical political investigation of women's issues in relation to men and the society at large, into a bland exercise that fails to translate gender theory into practice, raising the question of whether mainstreaming gender has been able to create any 'strategic spaces' for women in development or not (Baden and Goetz 2005; Coles and Wallace 2005; Cornwall, Harrison, and Whitehead 2007; Jackson and Pearson 2005; Sardenberg 2007). Women and men alike are impacted negatively by these half-measures, although as we have shown here women often bear the brunt of these programs' negative outcomes.

One aspect of transformative change for women and men can be achieved by acknowledging the role of feminist bureaucrats in the development process. Bridging gaps and suspicions that exist between feminist bureaucrats who are part of development institutions/state machinery, and feminist activists who remain closer to the grassroots and are a part of efforts by civil societies to achieve gender

transformation, is key to achieving real success in gender and development projects (and thus WatSan initiatives) (Eyben and Turquet 2013). The recommendations that follow are in response to calls by feminist scholars of development to recognize the political obstacles faced by NGOs (and development institutions), such as the need to implement measureable outcomes, narrow focus on planning, monitoring, and documentation, and justifying policy changes on the basis of statistical evidence of gender transformation (Eyben 2013). Recognizing that 'doing gender' is difficult, unwieldy, and culturally-specific, how do we learn from these findings and move from critique and problem identification to real and actionable change?

Conclusions and recommendations

One thing is clear – WatSan practitioners must forward women's participation in more culturally relevant and truly inclusive ways if they want beneficial outcomes from their programs. Project managers must think about ways in which to include women in WatSan that don't wrench them into a position they don't want, can't participate in, and for which they could be criticized at home. Including both men and women in this initiative in a constructive way is the key format for true inclusion, but only if development actors also acknowledge the relationality of power and gender roles already entrenched in societies. To address this, we have identified five major policy recommendations for change. First, there must be a push to ensure that NGOs understand the lived realities of women's work lives, and provide assistance that allows women to participate and have their voices heard without private sanction (e.g. child care should be included in water and development project budgets). Second, NGOs' endeavors should include both economically focused initiatives aimed at women's empowerment as well as non-capitalocentric initiatives. Third, NGOs should carefully include male family members in programs aimed at women's empowerment. Fourth, the periodic training of NGO staff and executive personnel (male and female) on women's participation and empowerment critiques and discourses, as well as social and geographical context, primarily focusing on the importance of understanding the interplay between these issues, is necessary. And fifth, strategies should be created for promoting inter-organizational alliances between feminist bureaucrats and NGO staff committed to achieving gender transformation, WatSan scholars, and grassroots feminist activists. Actionable examples of how to engage these policy recommendations will vary by context and region, and we certainly invite and encourage more examples of this in scholarly and practicing circles.

While we do assert that water development projects have had some negative impact, we *do not* advocate that projects discontinue attention to gender and to women's place in water projects. Instead, we conclude that, if gender aims are implemented more appropriately, they can have truly positive outcomes. The process will be incremental. More research is needed. Effective praxis-based

approaches and increased academic-practitioner relationships are paramount to achieving success. Ultimately, the reality of water scarcity makes ensuring equal and positive participation in the process of procuring and disseminating clean, fresh water around the globe extremely important. Ensuring women's position within this should be of key concern to researchers and practitioners alike.

Notes

1. This term refers to the definition of hydro-social research as attending to the 'circulation of water as a combined physical and social process, a hybridized socio-natural flow that fuses together nature and society in inseparable manners' (as summarized by Swyngedouw 2009 of his earlier work in 2006).
2. See Yi-fu Tuan's (1979) work for a foundational exploration of space and place.
3. This assumption is commonly made by both, beneficiaries of development as well as NGO personnel, that women recipients of development benefits will automatically and selflessly extend those benefits to her children and family.
4. Since this particular program draws part of its funding from the Government of India, funders in this context can be taken to mean representatives of external funding organizations as well as government officials.

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